

## ABSTRACT

A high capacity switch for switching communications traffic. The high capacity switch comprises a plurality of differing granularity switching levels, each switching level  
5 having at least one switch node capable of performing a switching operation at the granularity of the switching level and at least two primary connections, each connecting one of the switching levels to another one of the switching levels. At one of the switching levels, at least one switch node is capable of switching communications traffic along at least one switch connection path established along  
10 one of the primary connections, and is also capable of switching communications traffic along at least one secondary connection to another switch node within the same switching level, such that each of the at least one switch connection paths established is filled to a predetermined level.